

Applic. No.: 10/657,927
Amdt Dated March 30, 2005
Reply to Notice of Allowability of March 22, 2005

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of claims:

Claim 1 (previously presented): A guide tube for guiding an instrumentation lance into an interior of a pressure vessel, the guide tube comprising:

a lower tube part;

an upper tube part for configuration in the interior of the pressure vessel; and

a particles separator configured in said upper tube part;

said separator having a separation chamber;

said separation chamber having a first flow connection for exchanging water between said upper tube part and said lower tube part.

Claim 2 (previously presented): The guide tube according to claim 1, wherein:

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said separation chamber has a chamber base;

said first flow connection has an outlet opening configured in
said separation chamber; and

said outlet opening is located at a distance from said chamber
base.

Claim 3 (original): The guide tube according to claim 2,
further comprising:

a chamber cover closing said separation chamber;

said separation chamber having a second flow connection for
connecting to the interior of the pressure vessel.

Claim 4 (original): The guide tube according to claim 3,
wherein:

said separation chamber has a lower region; and

said second flow connection has an inlet opening configured in
said lower region of said separation chamber.

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Claim 5 (original): The guide tube according to claim 4,
wherein:

said first flow connection is formed as a tube;

said second flow connection is formed as a tube;

said inlet opening of said second flow connection is
configured in said separation chamber; and

said inlet opening of said second flow connection is
configured underneath said outlet opening of said first flow
connection.

Claim 6 (original): The guide tube according to claim 3,
wherein:

said upper tube part has a tube inner wall; and

said chamber base is sealed with said tube inner wall of said
upper tube part.

Claim 7 (original): The guide tube according to claim 3,
wherein:

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said upper tube part has a tube inner wall; and

said chamber cover is sealed with said tube inner wall of said upper tube part.

Claim 8 (original): The guide tube according to claim 1, in combination with the instrumentation lance, wherein:

the instrumentation lance has an interior, and

said separator is configured in the interior of the instrumentation lance.

Claim 9 (original): The guide tube according to claim 1, in combination with a reactor pressure vessel for a nuclear power station, wherein the guide tube extends into the nuclear power station.

Claim 10 (currently amended): A method for preventing an accumulation of particles outside of a pressure vessel in a guide tube, the method which comprises:

providing a particles separator with a separation chamber in an upper tube part of the guide tube;

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configuring the upper tube part of the guide tube within the pressure vessel;

guiding an instrumentation lance into the pressure vessel with the guide tube; and

using the separator to prevent particles from traveling from the upper tube part of the guide tube to other parts of the tube guide by providing the separation chamber with a first flow connection for exchanging water between the upper tube part and the lower tube part.

Claim 11 (currently amended): The method according to claim 10, which further comprises:

providing the separator with a separation chamber having with an outlet opening configured above an inlet opening; and

configuring the separation chamber for operating such that, when water loaded with particles enters the inlet opening of the separation chamber, unloaded water emerges from the outlet opening of the separation chamber into a lower tube part of the guide tube.

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Claim 12 (currently amended): The method according to claim 10, which further comprises providing the separator with a operating the separation chamber operating such that, when unloaded water flows out of a lower tube part of the guide tube into the separation chamber of the separator, water loaded with particles flows out of the separation chamber via a second flow connection into the pressure vessel.